

All communications respecting this case should identify it by number and names of parties.



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BOARD OF PATENT APPEALS
AND INTERFERENCES

Patentee: Canich
Serial No.: 07/533,245, filed
06/04/90, now Patent No.
5,055,438, issued 10/08/91
For: OLEFIN POLYMERIZATION
CATALYSTS
Accorded Benefit of: U.S.
S.No. 07/406,495, filed
09/13/89, now abandoned

The case referred to above has been forwarded to the Board of Patent Appeals and Interferences because it is adjudged to interfere with other cases hereafter specified. Attention is directed to the fact that this interference is declared pursuant to 37 CFR 1.601 et seq., effective February 11, 1985 (49 F.R. 48416. 1050 O.G. 385). The interference is designated as No. 102,955.

By direction of the Commissioner of Patents and Trademarks and as required by 35 USC 135(c), notice is hereby given the parties of the requirement of the law for filing in the Patent and Trademark Office a copy of any agreement "in connection with or in contemplation of the termination of the interference."

The cases involved in this interference are:

Junior Party

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Serial No.: 07/533,245, filed 06/04/90, now Patent No. 5,055,438,
issued 10/08/91

For: OLEFIN POLYMERIZATION CATALYSTS.

Assignee: Exxon Chemical Patents, Inc., Linden, NJ

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Accorded Benefit of: U.S. S.No. 07/406,945, filed 09/13/89, now
abandoned

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Serial No.: 07/545,403, filed 07/03/90

For: CONSTRAINED GEOMETRY ADDITION POLYMERIZATION CATALYSTS,
PROCESSES FOR THEIR PREPARATION, PRECURSORS THEREFOR,
METHODS OF USE, AND NOVEL POLYMERS FORMED THEREWITH

Patent No. 5,055,438

-3-

Assignee: None

Attorneys of Record: Douglas N. Deline, Bruce M. Kanuch and
Richard G. Waterman

Associate Attorneys: None

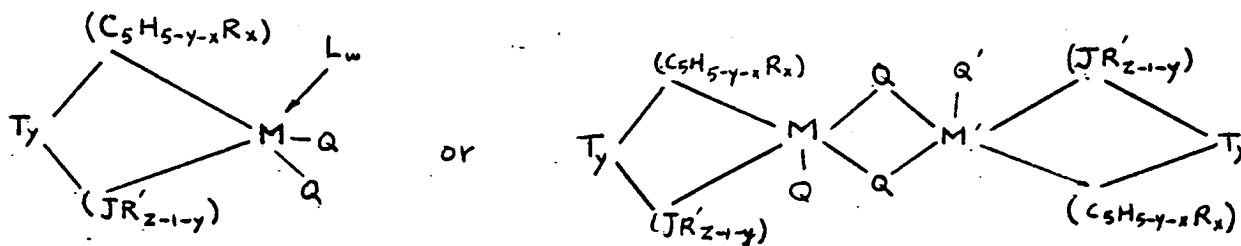
Accorded Benefit of: U.S. S.Nos. 07/428,276, filed 10/27/89;
07/401,344 filed 08/31/89, all abandoned

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Count 1

A catalyst system comprising:

(A) a Group IV B transition metal component of the formula:



wherein M is Zr, Hf or Ti;

$(C_5H_{5-y-x}R_x)$ is a cyclopentadienyl ring which is substituted it [sic: with] from zero to five groups R , " x " is 0, 1, 2, 3, 4 or 5 denoting the degree of substitution, and each R is, independently, a radical selected from a group consisting of C_1 - C_{20} hydrocarbyl radicals, C_1 - C_{20} substituted hydrocarbyl radicals wherein one or more hydrogen atoms are replaced by a halogen atom, C_1 - C_{20} hydrocarbyl-substituted metalloid radicals wherein the metalloid is selected from the Group IV A of the Periodic Table of Elements and halogen radicals or $(C_5H_{5-y-x}R_x)$ is a cyclopentadienyl ring in which two adjacent R -groups are joined forming C_4 - C_{20} ring to give a saturated or unsaturated polycyclic cyclopentadienyl ligand;

(JR'_{z-1-y}) is a heteroatom ligand in which J is an element with a coordination number of three from Group V A or an element with a coordination number of two from Group VI A of the Periodic Table of Elements, each R' is, independently a radical selected from a group consisting of C₁-C₂₀ hydrocarbyl radicals wherein one or more hydrogen atoms is replaced by a halogen atom, and "z" is the coordination number of the element J;

each Q is, independently any univalent anionic ligand or two Q's are a divalent anionic chelating agent;

"y" is 0 or 1 when w is greater than 0; y is 1 when w is 0, when

"y" is 1, T is a covalent bridging group containing a Group IV A or V A element;

L is a Lewis base where "w" denotes a number from 0 to 3; and

(B) an alumoxane.

or

A catalyst useful in addition polymerizations comprising the following components:

a) a metal coordination complex comprising a metal of group 4 of the Periodic Table of Elements and a delocalized π -bonded moiety substituted with a constrain-inducing moiety, said complex having a constrained geometry about the metal atom such that the angle at the metal between the centroid of the delocalized,


substituted π -bonded moiety and the center of at least one remaining substituent is less than such angle in a similar complex containing a similar π -bonded moiety lacking in such constrain-inducing substituent, and provided further that for such complexes comprising more than one delocalized, substituted π -bonded moiety, only one thereof for each metal atom of the complex is a cyclic, delocalized, substituted π -bonded moiety; and

b) an alkylaluminumoxane activating cocatalyst.

The claims of the parties which correspond to this count are:

Canich: Claims 1-7.

Stevens et al: Claims 5, 6, 24, 27 and 28.


Mary F. Downey
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MFD/raj